

## Structural and Functional Model of Future Craftsmen Legal competence Generation during Professional Education

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## **ABSTRACT**

Formation of the law-governed state institutions in Russia, development of civil society, need for neutralizing the legal nihilism and generation of public legal culture, state demand for legally competent specialists, representing the public and social value, justify the relevancy of the investigated issue, on the one hand. On the other hand, it is determined by the necessity to perform and protect craft activity within the legal framework in compliance with the professional requirements, representing the personal value. Purpose of this article is to describe the progress of development and testing of structural and functional model of future craftsmen legal competence generation at the institutions of secondary professional education. The principle method to research the issue consists in simulation, which enables for representing the problem as process of task-oriented and deliberate mastering the legal competence by the future professionals during study at the institutions of secondary professional education. This article describes the structural and functional model of future craftsmen legal competence generation at the institutions of secondary professional education which consists of several interrelated components: target component, descriptive component, structuring and pragmatic component, evaluative and effective component; it determines a complex of pedagogical conditions facilitating the implementation of the model, develops a range of evaluation means to assess the level of the generated legal competence of the future craftsmen. Materials of this article can be useful for students learning the professions at the institutions of secondary professional education, for all categories of teachers and specialists in the field of professional craft education.

## KEYWORDS

Craftsman, craft activities, craft training, craft vocations, legal competence

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## Introduction

Structural transformation of economy accompanies the transition of the developed countries to the post-industrial society. Small and middle-sized enterprises together with big companies serve the foundation of their sustainable development. It is due to

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the small and middle-sized enterprises implementing innovations to their production that range of products and services is frequently changing; they rapidly capture the available market share and flexibly satisfy the demands of the customers. In the environment of the global crisis, small and middle-sized companies ensure the additional employment, thus relieving the consequences of the crisis and decreasing the social and economic tension in society (Vodianova, 2010; Valeeva & Bushmeleva, 2016; Zakirova & Shilova, 2016). The economic system achieves strength through innovative activity, continuous renovation and flexibility of the small and middle-sized companies.

New professions and employees appeared producing goods and services of varying quality and modifications. The craftsmen produce major part of such goods and services. Craft activity represents a type of labor operations to produce goods, and render services of generally end user's application (for private or family use) in small installments or by pieces, by individual orders of the customers (Romantcev, 2012; Tereschenko, Grib & Mackey, 2016).

Craft activity as a type of business activity existed and developed in Russia up to the thirties of the 20<sup>th</sup> century. Then in the following years due to ideological reasons, it was artificially excluded from the economy of our country. The system of the industrial workers' training originated at that time included focused specialization, limitation of independence and responsibility, but did not foresee any development of communicative skills and flexibility (Romantcev, 1997).

In modern Russia involvement of employees into the new social and economic *market* relations objectively leads to the need to train "new" labor force - craftsmen (Romantcev, 2014).

The modern craftsman shall possess the diversified qualification for quality performance of individual orders, capability of innovative operations for rapid update of the goods produced by him, autonomy for independent manufacture and sale of his products, social and professional flexibility for adaptation to the changes, and communicative skills for building up the social relations (Romantsev et al., 2016).

In the law-governed state, the craftsman needs legal culture to build up the relations with the consumers, economic entities and the state. Situation in our country is complicated with the several aspects: national commercial law does not correspond to the rules of international law preventing integration of the Russian economy to the structure of global market, there are no legal regulators for craft activity in the environment of local market economy, "illegal" practices of commercial operations are widespread, capability of social regulators to govern the behavior of people in various groups is weakened.

In the environment of Russia's integration into the global economy, development of market relations inside the country and formation of the law-governed state, legal component in the profession activity of the craftsmen plays a more important part. The modern craftsman shall be governed with the legal forms of his operations, be responsible for the outcome of his work, capable of protecting his professional rights and interest, maintain the value hierarchy in the complex legal situations, overcome subjectivism of behavior and make the right legal decisions (Efanov & Bychkova, 2013). Being a creative person submerged into his activity, the craftsman perform his operations independently of other people, due to this involvement of the craftsman into the system of historically conditioned legal and moral relations is complicated by the autonomy and isolation of his existence. Simultaneously, participation of the artisan in the economic and social processes represents an essential condition of his activity. His involvement in the system of historically generated legal and moral relations and

capability to modify these relations determine *the social and pedagogical aspect* of this research relevancy.

*Scientific and theoretical aspect* of the research relevancy is conditioned by the importance of theoretical understanding of structure and content of future craftsman legal competence, procedure of its generation and diagnostics and implementation into the professional skills.

Growing importance of the legal component role in the professional activity causes the need for the future craftsmen to study a wide range of legal issues in addition to their training in the chosen profession. *Scientific and methodological aspect* of the research relevancy is conditioned by limited legal training of specialists of craft professions and need to analyze the content of the available educational programs in legal disciplines.

This, the subject of research is a relevant issue which can be analyzed in the background of social, scientific and practical activity. Solving of the task complies with the landmarks of public policy as stipulated in the "Foundations of public policy in the Russian Federation in the field of legal literacy and legal consciousness of the citizens", "Strategy of education development in the Russian Federation for period up to 2025", "Concept of education modernization for period up to 2020", "Complex measures for improvement of secondary professional educational system for 2015-2020".

## Materials and Methods

## Research methods

During the researches we used the following methods: theoretical methods (study of pedagogical, psychological and legal literature, analysis of statutory documents, federal public educational standards, teaching materials for training of craftsmen, general scientific research methods (analysis and synthesis, classification and comparison, specialization and idealization); diagnostic methods (questionnaire, interviewing, testing, method of tasks); empiric methods (study of the craftsmen work experience, regulatory and teaching methodological documentation, pedagogical observation, expert evaluation method); experimental methods (ascertaining, forming and test experimentation); methods of mathematical statistics and visual representation of results.

## Research experimental base

Professional institutions of Sverdlovsk, Chelyabinsk regions and Yamalo-Nenets autonomous territory developing and implementing experimental educational programs for teaching the personnel for craft enterprises serve the experimental base of the research. Managers of the craft enterprises and teachers of legal disciplines in Sverdlovsk, Chelyabinsk, Samara and other regions acted as experts. Over 500 students, 65 masters, academic staff and professional teachers, over 70 representatives of public craftsmen organizations and craft economic sector participated in the research and experimental works.

## Research phases

We studied the issue in three phases:

 at the first phase, we read about the issue in the pedagogical, psychological and legal literature, studied status of the issue in pedagogical theory and practice, analyzed the character of professional activity of the craftsmen, determined nature, properties and structure of the craftsmen legal competence, learnt the content of legal disciplines, and specified the main directions of the research;

- at the second phase, we developed the structural and functional model of future craftsmen legal competence generation, discovered the complex of pedagogical conditions facilitating the implementation of this model, elaborated a range of evaluation methods to determine the obtained level of future craftsmen legal competence;
- at the third phase, we implemented the structural and functional model of future craftsmen legal competence generation, didactical environment for legal competence generation, range of evaluation methods, processed the obtained results, made conclusions and recorded the research results.

## Results

## Structure of model of craftsmen legal competence

We chose the structural and functional model consisting of four interrelated components: target component, descriptive component, structuring and pragmatic component, evaluative and effective component (Figure 1) to describe the future craftsmen legal competence generation process.

On the one hand, this model is based on public need for legally competent specialists and formation of flexible system to satisfy the demand of society in the field of professional education, which represents public and social value. On the other hand, it is based on necessity for the student to carry out activity within the legal framework in compliance with the professional requirements, which represents the personal value.

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	Social order								
Target block	Personality: Legal craft activity, protection of professional rights and interests Requirements of professions		Society: craftsmen professionally acting in compliance with the laws and good business practices			State: sustainable economy due to development of small and middle-sized companies ensuring employment, craftsmen activity in compliance with legal corporate forms ards to the level of legal awareness of			
	the craftsmen  Objective - Future craftsmen legal competence generation during professional education								
	Tasks								
	Generatio n of legal knowledge system  Motivation for individual legal learning and use of legal knowledge in future craft activity		legal nd use of vledge in	Generatio n of lawful behavior skills		r	Generation of skills for craft activity based on laws and good business practices		Generation of legal personal qualities of future craftsman
_	Methodologic					activity approach, con			
Descriptive block	approach, person-centered approach, system-structured approach.  Principles: continuity, integrity, professional orientation.  Component of craftsman legal competence: social and legal, professional and legal, process and legal, pedagogical and legal, legal personality traits.								
Structuringandpragmatic block	Types of student activity								
	Educational and Activity or professional activity practi						cial and cultural activity		Scientific research activity
	Reproductive teaching methods (work with information legal systems, solving of practical legal tasks, simulation of production situations)  Teaching methods (work with information legal systems, solving of legal cases, researches in the chosen topic, project method)  Teaching aids								
	Teaching materials in "Fundamentals of Philosophy", "Legal support of professional activity", "Commercial law", "Management"			Information lega statutory docum			al systems, nents	complex of practical legal tasks, check and training tests, cases for analysis	
	Forms of education								
	Individual: individual educational course, individual training plan, individual project work, individual consultations, creative tasks, application to public and municipal authorities  Group: lectures, seminars, competitions, round tables, academic Olympics, conferences, presentation of projects, excursions, social projects, volunteering								
	Arrangement of educational environment Selection o educationa content bas		Selection of educational content base on consisten	legal ed gener cy learn resou specia		nplex a al com eratio ning co ources	ex approach to competence ation of students ng crafts, including ces of general, lized and legal		Application of pragmatic legal assignments
Evalı	Criteria and indicators of maturity of student - future craftsmen- legal competence, range of evaluative methods.  Result: a craftsman possessing the legal competence								

Figure 1. Structural and functional model of future craftsmen legal competence generation

## Content of model of future craftsmen legal competence generation

System-structured approach serves the methodological foundation of this model, because in both theory and practice of professional education we observe the trend to structure multi-dimensional competences and base the professional training on several approaches.

System-structured approach A.A. Ostapenko (2007), A.V. Dorofeev (2011), N.E. Erganova & A.V. Dorofeev (2013) is applied to justify the "complex, multidimensional, educational and professional achievements", because complex, integrative, multidimensional competences replaced "specific, specialized and niche competences". The researchers found out that a particular manifestation of phenomenon of multidimensionality depends on the nature of activity. In various professional spheres, multidimensionality manifests itself in different ways. In creative sphere, it shows itself as capability to integrate (construct) different trends, subjects, phenomena, approaches and views. Multidimensionality of professional activity is characterized with its following properties: multi-functionality, multi-tasking, flexibility and synergy (Erganova & Dorofeev, 2013).

Craft activity is multidimensional, multifunctional and integral. Capabilities and skills ensuring the multidimensionality of the craft activity represent a complicated task for training the professional personnel for craft economic sector. Systemstructured approach grants an effective tool for generation of multidimensionality. We can study the issue from all aspects using consistency, availability of structure grants depth of researches, and their integrity ensures comprehensiveness of the developed model (Dorofeev, 2011).

Craftsmen legal competence generation represents a complex dynamic system consisting of interrelated components: target component, descriptive component, structuring and pragmatic component, evaluative and effective component. Legal competence generation process is described in model being an integrity of structure blocks. The model blocks correspond to the legal competence training system components.

Target block of the developed structural and functional model of future craftsmen legal competence generation is conditioned by reforms of the Russian education and social demand determining the objective and tasks for craftsmen legal training. Future craftsmen legal competence generation during the professional education represents the main objective of the craftsmen legal training. We set out the following tasks:

- generation of legal knowledge system, skills, capabilities enabling successful craft activity;
- motivation for individual legal learning and use of legal knowledge in future craft activity;
  - generation of skills for lawful behavior;
  - generation of skills for craft activity based on laws and good business practices;
  - generation of legal personal qualities of future craftsman;
  - generation of respect for law and system of legal values.

Content of education as indicated in the *descriptive* block represents the central joint of objective and result consisting in future craftsman legal competence generation. Descriptive block is implemented in accordance with the social order of the society, state and person; it includes acquisition of comprehensive knowledge system, skills, capabilities, development of legal values, motivation for professional activity based on

law provisions, improvement of legal personal qualities, mastering the methods to implement the competence in compliance with the law provisions.

Future craftsmen legal competence structure includes social and legal, professional and legal, process and legal, pedagogical and legal components and legal personal qualities.

Structuring and pragmatic block includes the following types of student activity: educational and professional activity, activity during practice, social and cultural activity, scientific research activity.

All types of activity are interconnected through internal structure, educational results and procedure; they contain general objectives (learning of profession, acquisition of professionally valuable qualities and experience) and motives. These types of activity are carried out in unity and together form a personality of specialist, readiness for professional occupation (Dorozhkin, Zaitseva & Tatarskikh, 2016). Educational and professional activity is the major activity of the students. During educational activity (lectures, seminars, practices and independent work), the main objectives of the craftsmen training are achieved. Teaching methods are divided into reproductive (addressing learning) and productive.

## Teaching aids:

- teaching materials in "Fundamentals of Philosophy", "Legal support of professional activity", "Commercial law", "Management";
  - information legal systems, regulatory legal documents, professional literature;
  - complex of practical legal tasks, check and training tests.

We distinguish individual and group forms of education applied during legal competence generation. Individual (individual educational course, individual training plan, individual project work, individual consultations) and group (lectures, seminars, conferences, presentation of projects) forms.

Evaluative and effective block enables us to determine the level of development of future craftsmen legal competence and to monitor and assess the student activity. It consists of development of evaluation means range including questions to practical tasks, tasks for individual work, topics for papers, reports, tests for separate topics for student examination, practical legal tasks, tasks for academic Olympics and business games, test questions for examination.

# Pedagogical conditions for implementation of craftsman legal competence generation

We believe that future craftsmen legal competence generation issue cannot be solved only through testing of the respective model but we need to identify the complex of pedagogical conditions enabling implementation of this model, which ensures involvement of all the students into legal activity at all stages of professional education.

The first pedagogical condition consists in arrangement of educational environment supporting the legal affirmations and moral values. It is impossible to teach students all the skills of confronting the egoistic individualism and gross manipulations, but we believe that we can arrange an educational environment in which we can condemn and overcome the trend of regressive professional and personal development. At the educational environment, all the participants of educational process shall accept and apply rules of law based on which individual lawful behavior is generated.

If we consider the craft activity being a form of business we come to the need for students to learn the legal rules protecting private interests (commercial, civil and labor law). Morality and ethics - the most important forms of social and individual consciousness - immensely influence the generation and application of private interests. Actions of businesspersons are obligatorily subordinated to a number of ethical standards, among which we can name honesty, good faith, respect for other people, and honor as being characteristic for the developed business culture. There are lower customs: unreliability, deceit and up-to-the-minute profit. At the actual business environment, lower rules might seem more attractive and acceptable by a part of society, for instance, in frequent situations of choice between private and public interest, when it is impossible to make use of one without damaging the other (Franz, 2005). Legal rules governing a narrow range of public relations require less from a person than ethical standards. Variety of ethical standards and complexity of the most preferable choice regulated by them predetermine arrangement of educational environment challenging the student behavior and directing them to the highest standard of behavior specific for the developed business culture.

The second pedagogical condition consists in selection of education content based on principle of consistency. Professional activity of craftsman doing business is connected to many functions (management of craft enterprise, economy and finance, craft works production process, occupational and environmental safety, sale of ready products), and content of legal education shall correspond to the multifunctional craft activity. In conditions of minimum time given for law study in the system of secondary professional education, it is impossible to learn all branches of law, and it is practical to choose the blocks of legal issues related to activity of craftsman doing business. Legal issues shall be referred to the moral context by explaining the relation between such notions as "law", "ethics", "morality" to the students and showing the place of rules at governing the social life of society, i.e. it is required to combine the legal education and legal nurturing.

The third pedagogical condition consists in complex approach to craft profession student legal competence generation, which includes the resources of general, special and legal disciplines.

Complex approach is obtained through introduction of a number of legal issues to the materials of general and special disciplines and explanation of content for notions and legal rules in the national historical and economic context to the students.

Within the scope of this pedagogical condition implementation, we need to use the active forms of educational work: legal warm-ups, intellectual training, legal debates, seminars and business games. The said forms of training and education develop the student's capability to listen to the communication partner, analyze the said words, ask questions, reflect, process the information, come to the motivated conclusions. In addition, during the educational process of the said educational forms, the student can take the place of other people, evaluate own actions and respect other people experience. Such forms of education enable a deeper understanding of materials and generate axiological attitude to the law as a social and professional regulator of the student's activity.

The fourth pedagogical condition includes application of pragmatic legal tasks. We understand a pragmatic task as a problematic legal situation related to professional field of craftsman activity and requiring solving with legal means.

Due to their content difference, we can distinguish three types of pragmatic legal tasks: traditional tasks, tasks with missing data and creative tasks.

- 1. Traditional pragmatic legal tasks are designed to learn the notional and operative framework, content of respective branch of law. For instance, there are tasks divided per types of obligations (sale and purchase, contractor works, rendering of paid services). The students need to select the branch of law, sub-branch of law, give a brief description to the actions of the persons mentioned in the task, verify the made decision by reference to the articles of statutory documents to solve such tasks.
- 2. Pragmatic legal tasks, which can suggest missing initial data, probabilistic solution and (or) several solutions. For instance, tasks to describe labor or civil law relations. In order to solve the tasks, students need to apply the knowledge from various branches of law, structure evidences depending on the accepted position, forecast the further development of situation and foresee the outcome of the made decisions.
- 3. Creative legal tasks with uncertain conditions. The tasks have general description and require form student to actively apply theoretical knowledge and use the reference books and professional literature.

While solving the pragmatic legal tasks future craftsmen can actuate the theoretical knowledge, develop skills of analysis, synthesis and critical thinking, and find the required information and variants to overcome the complicated legal situation of professional craft activity on their own.

Thus, the suggested structural and functional model of future craftsmen legal competence generation at the institutions of secondary professional education reflects the main trends of modern legal education system and can be used as a base for pedagogical process.

## Testing of the model of craftsman legal competence formation

For the purpose of confirmation of theoretical concept and verification of effectiveness of the developed structural and functional model of craftsman legal competence formation the experimental and research work has been performed as one of the most reliable methods of educational research.

Experimental and research work on future craftsmen legal competence formation has been performed during the period of 6 years (from September 2010 to June 2016). The research was longitudinal (longtime and regular examination of the specific group of people for the same parameters) and involved over 500 students of handicraft professions, 65 master hands, scientific-educational and professional-educational workers, more than 70 representatives of public handicraft organizations and handicraft economy sectors of Sverdlovsk, Chelyabinsk, Samara and other regions, Yamalo-Nenets Autonomous Okrug.

*The first stage of the experimental and research work –identifying stage* - dealt with the following tasks:

- 1. To determine the necessity of future craftsmen legal competence formation by means of expert assessment method.
- 2. If a necessity of future craftsmen legal competence formation exists, to determine structural and content components of legal competence by means of expert assessment method.
- 3. To identify the students' opinion whether legal competence is required for future professional activities.
- 4. To determine the level of legal competence of the future craftsmen by means of self-assessment method.

5. To identify actual level of legal competence of the first-year students studying at handicraft specialties by means of expert assessment method.

For solution of the first task of the identifying stage of research a method of expert assessment was used (a method allowing to obtain the necessary information from competent persons – experts (Obraztsov, 2004). Heads of handicraft companies (70 people totally, overall staff of the companies being 278 people) and teachers of law discipline (65 people totally) served as experts. The following criteria were taken into account while choosing the experts: for heads of handicraft companies – kind of economic activities (finishing operations), number of employees in the company (from 2 to 15 people), duration of company activities (more than 2 years); for teachers of law disciplines – professional and educational competence, qualification category (the first or the second), and record of educational activities (more than 5 years).

The research showed that 87% of respondents – heads of handicraft companies, and 94% of respondents – teachers of law disciplines considered it necessary to develop legal competence of the students – future craftsmen.

For solution of the second task of the identifying stage of research – determination of structure and content of each component of legal competence – pedagogical research has been performed in the following sequence:

- 1. Based on the examination of psychological and pedagogical, social and economic and juridical literature a generalized list of elements of legal competence was determined.
- 2. The identified elements were divided into groups: social and legal, professional and legal, technological and legal, pedagogical and legal, legal personal qualities.
- 3. Significance of each estimated element in the craftsman activity was determined by means of expert assessment method.

Each participant was given a questionnaire containing the generalized list of elements of craftsman legal competence, and was to choose the most important. After that the elements were ranged by level of significance in future professional activities, the most significant being marked "5", the list significant – "0". For each identified content element weight coefficient was calculated:  $v_{ip}$ (for heads of handicraft companies),  $v_{i}$   $_{n}$ (for teachers of law disciplines). Analysis of the results allowed determining the significance of each estimated element in the craftsman activity.

Analysis of the results allowed establishing the following:

- 1) In the structure of social and legal component there are qualities determining ability and readiness to use the following elements in professional activities:
- knowledge: of taxes and fees legislation, insurance payments ( $v_{ip} = 0.143$ ,  $v_{in} = 0.140$ ,  $v_{i.cp.} = 0.125$ ), consumer protection legislation ( $v_{ip} = 0.137$ ,  $v_{in} = 0.146$ ,  $v_{icp.} = 0.125$ ), basics of contractual, labor and civil law ( $v_{ip} = 0.141$ ,  $v_{in} = 0.132$ ,  $v_{icp.} = 0.125$ );
- ability: to respect consumer rights, produce goods and services of high quality ( $v_i$  p = 0.112,  $v_i$  p = 0.116,  $v_{icp.} = 0.091$ ), enter into cooperation, partnership and technological interactions ( $v_{ip} = 0.111$ ,  $v_{in} = 0.100$ ,  $v_{icp.} = 0.091$ ), estimate its actions and behavior in the context of law ( $v_{ip} = 0.108$ ,  $v_{in} = 0.102$ ,  $v_{icp.} = 0.091$ );
- application: of skills of business communication with customers, competitors and other legal subjects ( $v_{ip}$  = 0,126,  $v_{in}$  = 0,127,  $v_{icp.}$  = 0,111), forms and methods of competitive practices contributing to fair competition ( $v_{ip}$  = 0,119,  $v_{in}$  = 0,114,  $v_{icp.}$  = 0,111).

- 2) In the structure of professional and legal component there are qualities determining ability and readiness to use the following elements in professional activities:
- knowledge: of professional activities protection methods ( $v_{i p} = 0.160$ ,  $v_{i n} = 0.176$ ,  $v_{icp.} = 0.143$ ), laws and other statutory acts, regulating supervisory powers of executive authorities ( $v_{ip} = 0.158$ ,  $v_{i n} = 0.131$ ,  $v_{icp.} = 0.143$ ), legal provisions determining legal status of a craftsman and regulating relations with the government ( $v_{i p} = 0.151$ ,  $v_{i n} = 0.149$ ,  $v_{icp.} = 0.143$ );
- ability: to raise its legal competence in professional activities ( $v_{ip} = 0.153$ ,  $v_{in} = 0.124$ ,  $v_{icp.} = 0.143$ ), to defend its professional interests using legal measures ( $v_{ip} = 0.149$ ,  $v_{in} = 0.150$ ,  $v_{icp.} = 0.143$ ), estimate legal consequences of its professional activities ( $v_{ip} = 0.147$ ,  $v_{in} = 0.156$ ,  $v_{icp.} = 0.143$ );
- application: of conflicts resolution methods and difficult professional legal situations ( $v_{ip} = 0.330$ ,  $v_{in} = 0.368$ ,  $v_{icp} = 0.333$ ).
- 3) In the structure of technological and legal component the most needed qualities are those determining ability and readiness to use the following elements in professional activities:
- knowledge of legislative and regulatory legal acts, methodological materials for provision of product quality ( $v_{ip} = 0.097$ ,  $v_{in} = 0.082$ ,  $v_{icp} = 0.091$ ), standards, technical requirements to raw materials, finished products (goods, services) ( $v_{ip} = 0.096$ ,  $v_{in} = 0.104$ ,  $v_{icp} = 0.091$ ), methodological and regulatory materials for engineering preparation of handicraft production ( $v_{ip} = 0.092$ ,  $v_{in} = 0.100$ ,  $v_{icp} = 0.091$ );
- ability to consider claims for low quality products, analyze and eliminate its reasons ( $v_{ip} = 0.230$ ,  $v_{in} = 0.192$ ,  $v_{icp} = 0.200$ ), to improve safety, environmental friendliness, comfortability of the produced products ( $v_{ip} = 0.221$ ,  $v_{in} = 0.225$ ,  $v_{icp} = 0.200$ ), to work with technical documentation ( $v_{ip} = 0.212$ ,  $v_{in} = 0.207$ ,  $v_{icp} = 0.200$ );
- application: of methods of products quality improvement ( $v_{ip} = 0.344$ ,  $v_{in} = 0.291$ ,  $v_{icp} = 0.333$ ), safety regulations, fire security, environmental safety, labor safety rules ( $v_{ip} = 0.326$ ,  $v_{in} = 0.358$ ,  $v_{icp} = 0.333$ ).
- 4) In the structure of pedagogical and legal component the most needed qualities are those determining ability and readiness to use the following elements in professional activities:
- knowledge: of qualifying requirements to the apprentice for selection to the work team, his duties, kinds of performed works ( $v_{ip} = 0.148$ ,  $v_{in} = 0.167$ ,  $v_{icp.} = 0.143$ ), legislative and regulatory legal acts aimed at health protection during education and production activities, safety of handicraft training ( $v_{ip} = 0.148$ ,  $v_{in} = 0.142$ ,  $v_{icp.} = 0.143$ );
- ability: to plan, arrange and control education and production handicraft activities in accordance with legislative and regulatory legal acts ( $v_{ip} = 0.128$ ,  $v_{in} = 0.147$ ,  $v_{icp.} = 0.125$ ), to respect labor and civil legislation rules for selection of a team of people desiring to do handicraft works ( $v_{ip} = 0.136$ ,  $v_{in} = 0.135$ ,  $v_{icp.} = 0.125$ );
- application: of methods of preparation of wrights of mass and high ranks, categories, qualifications, improvement of craftsmanship ( $v_{ip} = 0.342$ ,  $v_{in} = 0.356$ ,  $v_{icp} = 0.333$ ).
- 5) Results of examination of personal craftsman legal qualities content show that the most significant qualities in view of professional activity are independence ( $v_{ip} = 0.060$ ,  $v_{in} = 0.054$ ,  $v_{icp} = 0.045$ ), discipline ( $v_{ip} = 0.051$ ,  $v_{in} = 0.058$ ,  $v_{icp} = 0.045$ ), responsibility ( $v_{ip} = 0.051$ ,  $v_{in} = 0.060$ ,  $v_{icp} = 0.045$ ), fairness ( $v_{ip} = 0.050$ ,  $v_{in} = 0.060$ ,  $v_{icp} = 0.045$ )

0,045), decency ( $v_{ip}$  = 0,050,  $v_{in}$  = 0,053,  $v_{icp}$ = 0,045), good behavior ( $v_{ip}$  = 0,050,  $v_{in}$  = 0,052,  $v_{icp}$ = 0,045), obligingness ( $v_{ip}$  = 0,050,  $v_{in}$  = 0,055,  $v_{icp}$ = 0,045).

For solution of the third task of the identifying stage of research – to identify the students' opinion whether legal competence is necessary for future professional activities – surveying of the first-year student was performed. 493 students took part, out of which 247 students represented the control group, and 246 students represented the experimental group. The control and experimental groups content was determined according to homogeneity principle in natural conditions of educational process. Equalizing the groups' content and provision of reliability of the results, can be achieved through taking definitely weaker group as an experimental group (according to the information of incoming diagnostics). In this case confirmation of higher results in the experimental group proves effectiveness of the innovation (Zagvyazinsky & Atakhanov, 2003). Survey showed that 83% of respondents from the control group and 79% of the respondents from the experimental group considered that legal knowledge contributed to professional success.

For solution of the fourth task of the identifying stage of research – to determine the level of legal competence of the students by means of self-assessment method – the first-year students were given a questionnaire.

The results of the survey stated that 18% of the control group and 22% of the experimental group unsatisfactory evaluated their level of legal competence; 67% of the control group and 65% of the experimental group satisfactory evaluated their level of legal competence; 15% of the control group and 13% of the experimental group evaluated their level of legal competence as good. When asked: "What additional competencies are required for you for more effective professional activities?", - 31% of respondents from the control group and 35% of respondents from the experimental group mentioned legal competencies, 18% of the control group and 21% of the experimental group mentioned economical competencies, 16% of the control group and 18% of the experimental group mentioned overall cultural competencies. Therefore estimating their level of legal competence as satisfactory, students realize the necessity to improve legal knowledge for more effective professional activity.

When asked: "Does learning of legal disciplines generate interest for you?", - 74% of the respondents from the control group and 79% of experimental group answered negatively; 14% of both groups refrained from answer, which evidenced lack of interest in learning legal disciplines. When asked: "What do you dislike during learning legal disciplines?", - 38% of the respondents from the control group and 47% of the experimental group mentioned monotonous, unchanging kind of activity; 23% of the respondents from the control group and 31% of the experimental group mentioned large volume of theoretical material. Such results show that realizing the necessity to improve legal knowledge, the students are not ready to learn large volume of theoretical material, and learning of legal disciplines is associated with monotonous unchanging activity. Moreover, when asked "Which form of education does contribute to obtaining and consolidation of legal knowledge to the fullest extent?", - 52% of the control group and 57% of the experimental group mentioned active learning methods, 33% of the control group and 31% of the experimental group mentioned combination of traditional and active methods of learning, and only 15% of the control group and 12% of the experimental group mentioned traditional methods of learning. Summarizing the above mentioned, we note that students estimate their level of legal competence satisfactory, however, realize the necessity of further development of legal knowledge for more effective professional activity. Along with that the students

consider active methods of learning and combination of traditional and active methods of learning to be the most effective.

For solution of the fifth task of the identifying stage of the research – to identify actual level of legal competence of the first-year students by means of expert assessment – first-year students were given practice-oriented legal tasks and test for determination of the legal knowledge level.

Analysis of the results led to the conclusion that 58% of the respondents from the control group and 67% of the experimental group failed to complete the tasks, which evidenced insufficient level of legal competence of future craftsmen. The lowest level was observed for ability to use previous knowledge and skills in solution of practice-oriented and creative legal tasks. Optimal level was noted for 26% of the respondents from the control group and 21% of the experimental group; and high level was noted for 16% of the respondents from the control group and 12% of the experimental group

The results of the identifying stage showed the necessity of introducing specially developed structural and functional model and deductive conditions for formation of legal competence of future craftsmen during professional training.

During the second stage of experimental and research work – forming stage – pedagogical process in the control group was arranged without any changes (using of traditional forms, means and methods of education). While pedagogical process in the experimental group was arranged in accordance with the structural and functional model of craftsmen legal competence formation taking into account pedagogical conditions and developed set of evaluation means.

During the third stage of experimental and research work – control stage – dynamics of the legal competence formation levels was determined, conclusions were made and the results of the research were drawn up.

Analysis of the levels of craftsmen legal competence formation gives the following conclusions:

- $-\,$  in the experimental group high level of legal competence formation increased by 9% and amounted to 21%, in the control group it increased insignificantly by 2% and amounted to 18%
- in the experimental group optimal level of legal competence formation increased by 30% and amounted to 51%, in the control group it increased by 7% and amounted to 33%
- $-\,$  in the experimental group insufficient level of legal competence formation decreased b9 30% and amounted to 28%, in the control group it decreased by 9% and amounted to 49%

Therefore used pedagogical conditions and structural-functional model of craftsmen legal competence formation are effective and can be used in preparation of students for future professional activity.

## **Discussions**

Russian craftsmanship and its educational constituent is a relatively new line of research for humanitarian sciences; analysis of its conceptual field shows that it is not theoretically developed, not fixed regulatory and it is semantically contradictory, which leads to certain scientific problems and practical tasks: 1) difficulty in scientific description; 2) obstacles for creation of modern rules and regulations; 3) uncertainty of craftsmen social status; 4) under-development of educational programs for craftsmen preparation.

The problem of establishing professional handicraft education aimed at well-targeted preparation of specialists for handicraft companies was considered in the works of G.M. Romantsev (2012, 2014), G.M. Romantsev & A.V. Efanov (2012), A.V. Moiseev & A.V. Efanov (2014), A.V. Efanov & Y.A. Nemtchinova (2013), E.M. Lokotnikova (2002), D.A. Kuprikov (1994).

Organizational and pedagogical conditions and system of psychological and pedagogical assistance of handicraft staff preparation are indicated in the works of E.F. Zeer et al. (2011), N.A. Doronin (2003), A.P. Zolnikov (2005).

The works of G.Sh. Sypacheva (2015), L.Z. Kuvandykova (2012), A.S. Anikina (2011), A.V. Korotun (2010), A.V.Kareva (2009), M.V. Snegireva (2009) are devoted to the formation of legal competence of the future specialists during professional education.

Formation of legal culture of the students is considered in the works of S.P. Zaitseva (2015), N.V. Korchagin (2012), T.B. Yurtaeva (2012), V.V. Potomahin (2009), S.A. Anokhin (2005).

However, the specific nature of the legal training of craftsmen was not given sufficient amount in the previous research. The process of legal competence formation of future craftsmen as a part of their professional competence, assuming ability and readiness to use the system of social-legal, professional-legal, technological-legal, pedagogical-legal knowledge and skills, and legal personal qualities in organization, performance and protection of the professional activities, as well as in formation of behavior of consumers and other economic entities, contributing to the development of competitive market relations and professional activities, modeling and planning of the educational process in current economic environment were not covered in previous research.

## Conclusion

The following results have been received during experimental and research work:

- 1. Definition of the term *craftsman legal competence* has been precised that is an integral personal quality based on legal values of the society reflecting readiness and ability to use the system of social-legal, professional-legal, technological-legal and pedagogical-legal knowledge and skills, legal personal qualities in organization, performance and protection of the professional activities, as well as in formation of behavior of consumers and other economic entities, contributing to the development of competitive market relations and professional activities.
- 2. The following interrelated components have been separated in the structure of craftsman legal competence: social-legal, professional-legal, technological-legal, pedagogical-legal and legal personal qualities.
- 3. The structural and functional model of future craftsman legal competence formation has been theoretically proved, developed and tested during experimental and research work; the model contains four interrelated components: objective, content-related, activity-related and resultative.
- 4. A system of pedagogical conditions contributing to the implementation of the structural and functional model of future craftsman legal competence formation has been identified; the system includes organization of the educational environment supporting legal directives and moral values, selection of the education content based on consistency principle, complex approach to formation of craftsmen legal competence, integrating the potential of general, special and law disciplines, usage of practice-oriented legal tasks.

5. A set of evaluation means for estimation of the level of future craftsmen legal competence (insufficient, optimal, high) has been developed.

Analysis of the results showed that the made hypothesis found confirmation. At the same time the conducted research doesn't claim to completely cover all the aspects of the problem due to its diversity, and raise a list of problems to be solved. Among them one should mention the problem of integration of general, general professional, professional and legal disciplines, selection of the legal disciplines content, development of legal competence in non-learning activities, legal self-education and self-development of the students.

The results of the research are designed for the specialists in the field of professional handicraft education, for all categories of teaching employees and other interested parties.

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No potential conflict of interest was reported by the authors.

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